Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A retaining ring comprising:

a generally annular body having a top surface, a bottom surface, an inner diameter surface, and an outer diameter surface, wherein the bottom surface includes a plurality of channels, each channel extending from the inner diameter surface to the outer diameter surface and having a curved section defining a rounded ceiling and substantially vertical side walls, wherein the curved section extends from the inner diameter to the outer diameter and the ceiling is concave in a cross-section perpendicular to the side-walls, a distance between the side-walls is constant from the bottom surface to the curved section and ~~the side-walls have a length that is greater than the depth of the curved section and~~ the outer diameter surface includes a ledge and ~~the vertical side-walls extend to substantially the same depth as the ledge~~ a height of at least one of the vertical side-walls is substantially same as a height of the ledge.

2. (Original) The retaining ring of claim 1, wherein the rounded ceiling has a semi-circular cross-section.

3. (Original) The retaining ring of claim 2, wherein the semi-circular cross-section has a diameter about equal to a width of the channel.

4. (Original) The retaining ring of claim 1, wherein the rounded ceiling has a flat portion.

5. (Previously Presented) The retaining ring of claim 4, wherein the rounded ceiling is rounded at an intersection of the flat portion and the vertical side-walls of the channel.

6. (Cancelled)

7. (Original) The retaining ring of claim 1, wherein the plurality of channels have substantially uniform depth.

8. (Original) The retaining ring of claim 1, wherein the plurality of channels are oriented at an angle relative to a radial segment extending through the center of the retaining ring.

9. (Original) The retaining ring of claim 8, wherein the angle is between 30° and 60°.

10. (Cancelled)

11. (Previously Presented) The retaining ring of claim 1, wherein the outer diameter surface includes a first portion adjacent the bottom surface that has an outer diameter less than a second portion adjacent the top surface.

12. (Cancelled)

13. (Original) The retaining ring of claim 1, wherein the annular body comprises a wearable material.

14. (Original) The retaining ring of claim 1, wherein the annular body comprises an upper portion and a lower portion, the upper portion being more rigid than the lower portion.

15. (Original) The retaining ring of claim 14, wherein the channels are formed in the lower portion.

16. (Original) The retaining ring of claim 15, wherein the lower portion is formed of a wearable material.

17. (Original) The retaining ring of claim 15, further comprising a plurality of passages extending through the upper portion from the inner diameter surface to the outer diameter surface.

18. (Previously Presented) The retaining ring of claim 1, wherein the plurality of channels are distributed at substantially equal angular intervals around the retaining ring.

19. (Currently Amended) A carrier head comprising:

a substrate receiving surface; and

a generally annular retaining ring surrounding the substrate receiving surface, the retaining ring having a top surface, a bottom surface, an inner diameter surface, and an outer diameter surface, wherein the bottom surface includes a plurality of channels, each channel extending from the inner diameter surface to the outer diameter surface and having a curved section defining a rounded ceiling and substantially vertical side walls, wherein the curved section extends from the inner diameter to the outer diameter and the ceiling is concave in a cross-section perpendicular to the side-walls, a distance between the side-walls is constant from the bottom surface to the curved section and ~~the side-walls have a length that is greater than the depth of the curved section~~ and the outer diameter surface includes a ledge and ~~the vertical side-walls extend to substantially the same depth as the ledge~~ a height of at least one of the vertical side-walls is substantially same as a height of the ledge.

20. (Previously Presented) A method of polishing, comprising:

creating relative motion between a substrate and a polishing surface;

restraining the substrate with a retaining ring that has a top surface, a bottom surface, an inner diameter surface, and an outer diameter surface, wherein the bottom surface includes a plurality of channels, each channel extending from the inner diameter surface to the outer diameter surface and having a curved section defining a rounded ceiling and substantially vertical side-walls, wherein the curved section extends from the inner diameter to the outer diameter and the ceiling is concave in a cross-section perpendicular to the side-walls, a distance between the side-walls is constant from the bottom surface to the curved section and ~~the side-walls have a length that is greater than the depth of the curved section and~~ the outer diameter surface includes a ledge and ~~the vertical side-walls extend to substantially the same depth as the ledge~~ a height of at least one of the vertical side-walls is substantially same as a height of the ledge; and

supplying a polishing liquid to the polishing surface so that the polishing liquid flows through the channels and beneath the retaining ring to the substrate.

21. (Previously Presented) The retaining ring of claim 1, wherein the side-walls of each channel are parallel to one another for a depth of at least 0.030 inches.

22. (New) The retaining ring of claim 1, wherein a height of at least one of the side-walls is greater than a depth of the curved section.